

Table 2: NON-EGU NOX Control Costs (Non-EGUs with 2007 projected emissions exceeding their allowances)

Source	Unit	Projected emissions (tons)	Allowances	Emissions reductions needed (tons)	Control strategy	Controlled emissions (tons)	Emissions reductions achieved (tons)	Control equipment cost				Monitoring cost				Total ozone season cost (control equipment and monitoring) - (\$)	Overall cost effectiveness (\$/ton)	Costs adjusted for emissions trading			
								Capital cost (\$)	Ozone season O&M cost (\$)	Total ozone season cost (\$)	Cost effectiveness (\$/ton)	Number of CEMS needed	Startup cost (\$)	Annual monitoring cost (\$)	Annualized monitoring cost (\$)			spare allowances	net income @ 2500/allowance	adjusted ozone season cost (\$)	cost effectiveness(\$/ton)
National Steel	Boiler	189	34		shut down																
IPL-Perry-K	unit 11	252	115	137	switched to gas firing in 1999	45	207					CEM in place									
IPL-Perry-K	unit 12	252	119	133	low Nox burner	126	126	2,169,455	52,770	405,849	3,221	1	180,000	37,517	66,677	472,526					
IPL-Perry-K	unit 13	167	64	103	switched to gas firing in 1999	26	141					CEM in place									
IPL-Perry-K	unit 14	167	59	108	switched to gas firing in 1999	27	140					CEM in place									
IPL-Perry-K	unit 15	57	43	14		57	0					1	180,000	37,517	66,677	66,677					
IPL-Perry-K	unit 16	57	52	5		57	0					1	180,000	37,517	66,677	66,677					
	Totals	952	452	500		337	615	2,169,455	52,770	405,849		3	540,000	112,551	200,031	605,880	985	115	287,975	317,905	517
New Energy	Boiler	631	241	390	low NOX burner & staged combustion air	241	390	4,028,201	91,377	746,967	1,914	CEM in place				746,967	1,914	0	0	746,967	1,914
ALCOA	unit1	1,260	1,019	241	low Nox burner	630	630	4,874,964	229,650	1,023,050	1,623	CEM in place				1,023,050	1,623				
ALCOA	unit2	827	988	(161)		827	0														
ALCOA	unit3	1,215	959	256		1,215	0														
	Totals	3,302	2,966	336		2,672	630	4,874,964	229,650	1,023,050	1,623					1,023,050	1,623	294	735,000	288,050	457
AMOCO	#3 Power Station																				
	Boiler #1	433	287	146	low Nox burner	216	216	2,522,605	41,863	452,418	2,091	1	180,000	37,517	66,677	519,095					
	Boiler #2	433	287	146	low Nox burner	216	216	2,522,605	41,863	452,418	2,091	1	180,000	37,517	66,677	519,095					
	Boiler #3	433	287	146	low Nox burner	216	216	2,522,605	41,863	452,418	2,091	1	180,000	37,517	66,677	519,095					
	Boiler #4	433	287	146	low Nox burner	216	216	2,522,605	41,863	452,418	2,091	1	180,000	37,517	66,677	519,095					
	Boiler #5	433	287	146		433	0					1	180,000	37,517	66,677	66,677					
	#1 Power Station																				
	Boiler #1	9	24	(15)		24	0					1	180,000	37,517	66,677	66,677					
	Boiler #2	9	24	(15)		24	0					1	180,000	37,517	66,677	66,677					
	Boiler #3	9	24	(15)		24	0					1	180,000	37,517	66,677	66,677					
	Boiler #4	9	24	(15)		24	0					1	180,000	37,517	66,677	66,677					
	Boiler#5	9	24	(15)		24	0					1	180,000	37,517	66,677	66,677					
	Totals	2,210	1,555	655		1,418	865	10,090,420	167,452	1,809,671	2,091		1,800,000	375,170	666,770	2,476,441	2,862	210	525,250	1,951,191	2,255
	Overall totals	7,096	5,214	1,882		4,668	2,501	21,163,040	541,249	3,985,537						4,852,338	1,940	619	1,548,225	3,304,113	1,321
	Total spare allowances		619																		
	1. Control equipment cost were estimated using USEPA's ACT document for Industrial/Institutional/Commercial boilers. Those costs are in 1992 dollars. The costs were adjusted to 1998 \$ using an estimated 1992/1998 inflation factor equal to 1.114.																				
	2. CEMs costs are in 1998 \$.The costs are not estimated for units with existing CEMS.																				
	3. A 50% control efficiency has been assumed for low NOX burners. Since LNB is an year-around control, actual cost effectiveness ratio may be lower.																				
	4. Shutdown units are not included in the cost estimates.																				